REMARKS

This Application has been carefully reviewed in light of the Office Action mailed October 19, 2004 ("Office Action"). At the time of the Office Action, Claims 1-31 were pending in the application. In the Office Action, the Examiner rejects Claims 1-17 and 19-31, and objects to Claim 18. Applicant amends Claims 4, 13, and 25 and cancels Claim 18.

Specification

The Examiner objects to the disclosure due to a variety of informalities. Applicant amends the specification to address the Examiner's concerns. No new subject matter has been added.

Claim Objections

The Examiner objects to Claims 4 and 25 due to informalities. Applicant amends Claims 4 and 25 accordingly.

Section 102 Rejections

The Examiner rejects Claims 1-7 and 20-26 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,526,066 B1 issued to Weaver ("*Weaver*"). Applicant respectfully requests reconsideration and allowance of Claims 1-7 and 20-26.

Claim 1 recites, in part, "A system comprising ... a finite state machine having a plurality of states interconnected through a plurality of events, wherein certain states and events in said plurality are implemented in software and other states and events in said plurality are implemented in hardware ... and a scheduler communicatively coupled to said finite state machine and having one or more parameters defining scheduled operations to be performed by said scheduler, wherein said finite state machine is configured to select one or more of said parameters to be used by said scheduler upon transition by said finite state machine from a first state to a second state." *Weaver* fails to teach, suggest, or disclose several elements of Claim 1.

For example, *Weaver* fails to teach, suggest, or disclose "wherein certain states and events in said plurality are implemented in software and other states and events in said plurality are implemented in hardware." Instead, *Weaver* implements all of its states and transitions in hardware only. In particular, *Weaver* states that "The FSM 50 is hardwired to

operate within one of a fixed number of states, and to have a predetermined set of transitions for transitioning between these states. ... Exemplary states 56, 58, 60 and 62 are illustrated in the state diagram 54 of FIG. 4. Each of the states 56, 58, 60 and 62 is hardwired within the FSM 50, as are the set of transitions, indicated with appropriate arrows, between these states. While the states and transitions for passing between the states are hardwired within the FSM 50, the conditions under which these states exist, and the conditions for triggering a transition from one state to another, are not hardwired within the state machine, and are programmable as will be described below." *Weaver* at col. 3, ll. 45-60. "As discussed above, a set of states, and a set of potential transitions between these states, are hardwired within the FSM 50. However, the definition of each of the states, and the definition of the transition conditions under which a transition from one state to another occurs, are programmable. To this end, the FSM 50 is coupled to read a state table 80, stored in the SRAM 52." *Weaver* at col. 4, ll. 28-34). Therefore, all of the states and transitions in *Weaver* are "hardwired," that is, implemented in hardware only. Storing the "definition of each of the states" and the "definition of the transition conditions" in a state table 80 and making them "programmable" does not mean that any "states and events" in *Weaver* are "implemented in software" as recited, in part, in Claim 1. On the contrary, all of the states and transitions in *Weaver* are still hardwired.

Weaver also fails to teach, suggest, or disclose, "a scheduler communicatively coupled to said finite state machine and having one or more parameters defining scheduled operations to be performed by said scheduler, wherein said finite state machine is configured to select one or more of said parameters to be used by said scheduler upon transition by said finite state machine from a first state to a second state." The "state table 80" of *Weaver* cited by the Examiner is not a "scheduler" as recited in Claim 1. In particular, the "state table 80" of *Weaver* "contains values for programming the FSM 50 so that the state transitions occur in response to the identification of predetermined bit sequences in the data stream..." *Weaver* at col. 4, ll. 41-44. Therefore, as described above, the "state table 80" includes the conditions under which the transitions between states occurs using the FSM 50 of *Weaver*. Nothing that is stored in the "state table 80" teaches, suggests, or discloses "parameters defining scheduled operations **to be performed by said scheduler**" (emphasis added), as recited, in part, in Claim 1. Indeed, the "state table 80" cannot even perform scheduled operations. On the contrary, the "state table 80" only contains "values for **programming the FSM 50** so that the

state transitions occur." (Emphasis added). Moreover, the "fetch and execute operations" described in *Weaver* at col. 4, ll. 34-38 are also "performed by the FSM 50," and therefore do not teach, suggest, or disclose "parameters to be **used by said scheduler** upon transition by said finite state machine from a first state to a second state," as recited, in part, in Claim 1 (emphasis added).

Therefore, *Weaver* fails to teach, suggest, or disclose several elements of Claim 1. For at least the reasons set forth above, Applicant respectfully requests reconsideration and allowance of Claim 1. Claims 2-7 depend from Claim 1, shown above to be allowable. For at least these reasons, Applicant respectfully requests reconsideration and allowance of Claims 2-7.

Claim 20 recites, in part, "A system comprising ... finite state machine means having a plurality of states interconnected through a plurality of events, wherein certain states and events in said plurality are implemented in software and other states and events in said plurality are implemented in hardware ... and scheduler means communicatively coupled to said finite state machine means and having one or more parameters defining scheduled operations to be performed by said scheduler, wherein said finite state machine means is configured to select one or more of said parameters to be used by said scheduler upon transition by said finite state machine means from a first state to a second state." For at least the reasons stated above with regard to Claim 1, Applicant respectfully requests reconsideration and allowance of Claim 20. Claims 21-26 depend from Claim 21, shown above to be allowable. For at least these reasons, Applicant respectfully requests reconsideration and allowance of Claims 21-26.

The Examiner rejects Claims 13-15 and 19 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,243,778 B1 issued to Fung et al. ("*Fung*"). The Examiner objects to Claim 18 as being dependent upon a rejected base claim, but indicates that it would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. As suggested by the Examiner, Applicant amends Claim 13 to include the elements of Claim 18. Applicant respectfully requests reconsideration and allowance of amended Claim 13. Claims 14-15 and 19 depend from Claim 13, shown above to be allowable. Applicant respectfully requests reconsideration and allowance of Claims 14-15 and 19.

Section 103 Rejections

The Examiner rejects Claims 8-10 and 27-29 under 35 U.S.C. § 103(a) as being unpatentable over *Weaver* in view of U.S. Patent No. 5,953,741 issued to Evoy et al. ("*Evoy*"). Claims 8-10 and 27-29 depend from independent claims shown above to be allowable. For at least these reasons, Applicant respectfully requests reconsideration and allowance of Claims 8-10 and 27-29.

The Examiner rejects Claims 11-12 and 30-31 under 35 U.S.C. § 103(a) as being unpatentable over *Weaver* in view of U.S. Patent No. 6,449,292 B1 issued to Weeber ("*Weeber*"). Claims 11-12 and 30-31 depend from independent claims shown above to be allowable. For at least these reasons, Applicant respectfully requests reconsideration and allowance of Claims 11-12 and 30-31.

The Examiner rejects Claims 16 and 17 under 35 U.S.C. § 103(a) as being unpatentable over *Fung* in view of U.S. Patent No. 2002/0025832 A1 issued to Durian et al. ("*Durian*"). Claims 16 and 17 depend from Claim 13 shown above to be allowable. For at least these reasons, Applicant respectfully requests reconsideration and allowance of Claims 16 and 17.
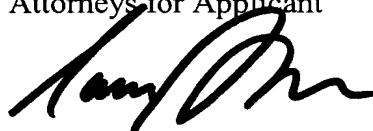
CONCLUSION

Applicant has made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicant respectfully requests full allowance of all pending claims.

If the Examiner feels that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to contact Samir A. Bhavsar, Attorney for Applicant, at the Examiner's convenience at (214) 953-6581.

Although no fees are believed due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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Date: **December 17**, 2004

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